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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/617,219	07/17/2000	Sanjoy Sen	10923RRUS01P	8426
27683	7590	11/19/2003	EXAMINER	
HAYNES AND BOONE, LLP 901 MAIN STREET, SUITE 3100 DALLAS, TX 75202			BLOUNT, STEVEN	
			ART UNIT	PAPER NUMBER
			2661	
			DATE MAILED: 11/19/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/617,219

Applicant(s)

SEN ET AL.

Examiner

Steven Blount

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s): _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 5 and 31 – 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,862,485 to Linneweh Jr. et al.

With regard to claim 1, Linneweh Jr. et al teaches reserving first and second radio resources in both a wireless node and detected target node, and performing a handoff. See the abstract, col 8 lines 55+, col 4 lines 60+, and columns 2 and 6. Although Linneweh Jr. et al does not absolutely state that the resources be equal, the statement in the last paragraph of the abstract, that "The serving base site (101) then allocates (309) *the* reserved communication resource (127) to the communication unit (112) upon the communication units initiation of the priority call" (emphasis added) which nearly certainly implies that they are equal, and it would also be obvious to implement it in this fashion in any event.

With regard to claim 2, the operation is under control by a controller in the BSC 118 (see figures 1 and 2). With regard to claim 3, the examiner does not believe it would be beyond the ordinary skill in the art to realize the desirability of using the unused radio bandwidth resources for other purposes when not needed. With regard to claims 4 - 5, note that in column 4 lines 63+, handoff is performed when the class of service

changes from one type to another (ie, one signal value to another). With regard to claims 31 – 32, see the above, and also note the mention of a software algorithm in col 6 line 47.

3. Claims 6 – 16, 24 – 29 and 33 – 38 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,438,370 to Einola et al.

With regard to claim 6, Einola teaches a method of performing handoff in a radio subsystem of a wireless network, comprising deciding which RNS to target (see, for example, col 8 lines 45+ and col 11 lines 19+), sending a relocation started message from the originating RNS to a core network, the core network coupling the RNS's (see, for example, col 8 line 48) and receiving the message at the target RNS (see col 8 line 48) and reserving radio resources at the target RNS (lu-links, see col 10 line 45, col 11 line 34, 48 and 63, col 10 lines 45+, col 12 lines 25+ ("binding identifiers for lu links to be established"), and col 12, lines 15+). Sending an acknowledgement message is taught in col 14, lines 23+. Although the target RNS does not reserve the resources as claimed on its own (it apparently does this with the help of the SNRC – see col 10, lines 43+), to have the RNS do it alone, instead of with the help of the SNRC, would be an obvious change well within the ordinary skill in the art.

With regard to claim 7, see the relocation request in col 11. With regard to claims 8 – 11, see col 10, lines 43+, where the "number of the lu-links" (ie, the radio resource) is mentioned, see col 12 lines 23+, where identifiers for the lu-links are mentioned, and note that IP addresses are commonly used as destination addresses for channel endpoints such as the RNC identity discussed in column 11, line 19. With regard to

claims 12 - 14, see col 14, lines 23+, and note that sending IP addresses and tunnel creation, in this context, would be obvious to help facilitate forming the connection creation. With regard to claims 15 – 16, while tunneling is not explicitly mentioned, it is mentioned in column 13, lines 1+ that the SRNC starts downlink transmission to the BS's in col 13, lines 1+, wherein tunneling to produce connections such as these is well known in the art. With regard to claims 24 – 29 and 33 – 38, see the rejections above, noting that, with respect to claims 33 – 38, these processes are all implementable in software.

4. Claims 17, 30, and 39 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,438,370 to Einola et al in view of Applicants Admitted Prior Art (hereinafter AAPA).

With regard to these claims, Einola et al teaches the invention as described above, but does not teach buffering the downlink packets in the target RNC. Buffering packets in a similar manner is taught in the specification, page 2 lines 15+ and page 3, lines 3+ of AAPA. Therefore, it would have been obvious to buffer the packets of Einola et al in light of the teachings of AAA in order to increase system throughput.

5. Claims 1 and 31 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 5,530,912 to Agrawal et al.

With regard to claim 1, Agrawal teaches reserving a channel to be used during handover between a mobile and its associated (ie, coupled) base station, wherein the channel has the same bandwidth (ie, resource) at both of these members and along the path joining them, wherein in col 4, lines 43+, it is stated that the base station detects

the mobile, then reserves a channel between them for that subscriber. Although in Agrawal it appears that channel reservation appears after detection, to reserve a first resource before the said detection is an obvious variation. Further, applicant has not listed that the steps be carried out in any particular order. With regard to claim 31, this process would be obvious to implement in software.

6. Claims 18 – 23, 40 – 45 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. patent 6,438,370 to Einola et al in view of U.S. patent 6,553,015 to Sato.

Einola et al teaches the invention as described above, but does not teach detailing information regarding the last packet sent after handoff. Sato teaches a similar process detailing the next cell to be transmitted when handoff is completed. See the abstract and figure 2, wherein the combination of Einola et al/AAPA with Sato would allow for faster recovery of the data transmission process after handoff. It is noted that the discussion of the CN and the suspension process is discussed above. With regard to claim 44, see col 11, line 28 of Einola et al.

7. Seven Blount may be reached at 703 – 305 – 0319 Monday through Friday, 9:00 to 5:30.

SB


11/6/03